

GEFRAN

LT67

RECTILINEAR DISPLACEMENT TRANSDUCER WITH IP67 PROTECTION



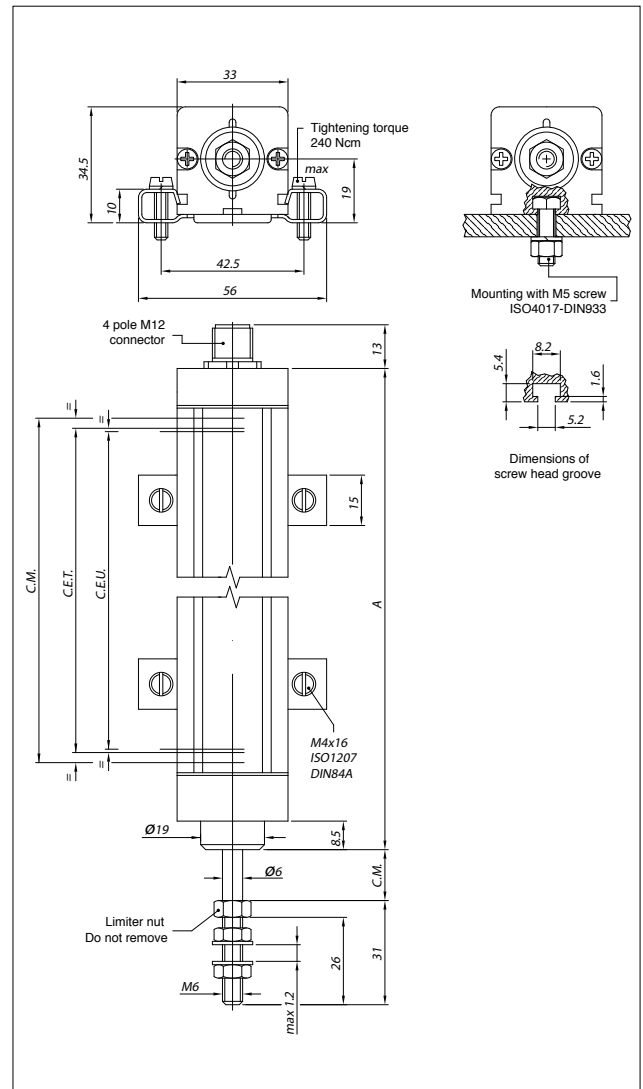
TECHNICAL DATA

Useful electrical stroke (C.E.U.)	from 50 to 1000 mm (for intermediate strokes see table "Electrical / Mechanical Data")
Independent linearity (within C.E.U.)	$\pm 0,05\%$
Resolution	infinita
Repeatability	0.01mm
Electrical connection	connettore 4 poli M12
Protection level	IP67 (utilizzare connettore femmina 4 poli M12 con gradi di protezione IP67 o superiore)
Life (NOT used in prolonged immersion)	> 25x10 ⁶ m percorsi, oppure > 100x10 ⁶ manovre, dei due il più restrittivo (entro la C.E.U.)
Displacement speed	Standard ≤ 3 m/s max ≤ 5 m/s
Displacement force	≤ 20 N
Vibrations	5...2000Hz, Amax =0,75 mm a max. = 20 g
Shock	50 g, 11ms.
Acceleration	200 m/s ² max (20g)
Tolerance on resistance	$\pm 20\%$
Recommended cursor current	< 0,1 μ A
Maximum cursor current	10mA
Maximum applicable voltage	60V
Electrical isolation	>100M Ω a 500V=, 1bar, 2s
Dielectric strength	< 100 μ A a 500V~, 50Hz, 2s, 1bar
Dissipation at 40°C (0W at 120°C)	3W
Actual Temperature Coefficient of the output voltage	≤ 5 ppm/°C tipico
Working temperature	-30...+100°C
Storage temperature	-50...+120°C
Material for transducer case	Alluminio anodizzato Nylon 66 G 25
Material for pull shaft	Acciaio C45, cromato 20 μ m
Mounting	Brackets with adjustable distance between centers or with M5 screw ISO4017-DIN933

Main features

- This transducer is designed to guarantee a high protection level (IP67) in applications under harsh conditions and outdoors, where it may be necessary to work in the direct presence of dust, dirt, or liquids (not in prolonged immersion)
- The grooves on the profile provide an excellent alternative to the usual system of fastening with brackets
- Ideal for applications on plastic injection presses with installation at points that are highly exposed to lubricants
- Also indicated for processing machines on which the transducer cannot be protected by guards

MECHANICAL DIMENSIONS



Important: all the data reported in the catalogue linearity, lifetime, temperature coefficient are valid for a sensor utilization as a ratiometric device with a max current across the cursor $I_c \leq 0.1 \mu A$

ELECTRICAL / MECHANICAL DATA

MODEL		50	75	100	130	150	175	200	225	275	300	350	375	400	450	500	600	650	750	900	1000*
Useful electric stroke (C.E.U.) +3/-0	mm	50	75	100	130	150	175	200	225	275	300	350	375	400	450	500	600	650	750	900	1000
Theoretical electrical stroke (C.E.T.) ±1	mm	C.E.U. + 3					C.E.U. + 4					355	380	406	457	508	609	660	762	914	1016
Resistance (C.E.T.)	kΩ	5																			
Mechanical stroke (C.M.)	mm	C.E.U. + 9					C.E.U. + 10					361	386	412	463	518	619	670	772	924	1026
Case length (A)	mm	C.E.U. + 71.5					C.E.U. + 72.5					423.5	448.5	474.5	525.5	580.5	681.5	733.5	834.5	986.5	1088.5

Note: It is recommended to keep the sliding parts lubricated, with a lubricant general purpose least every 6 months.

* = Only for vertical installations

ELECTRICAL CONNECTIONS

Connector output

- 4 nc
- 3 (+)
- 2
- 1 (-)

Connection side

C.E.U. (Useful Electrical Stroke)
C.E.T. (Theoretical Electrical Stroke)
C.M. (Mechanical Stroke)

INSTALLATION INSTRUCTIONS

- Make the specified electrical connections (DO NOT use the transducer as a variable resistance)
- When calibrating the transducer, be careful to set the stroke so that the output does not drop below 1% or rise above 99% of the voltage level.

ORDER CODE

Displacement transducer **LT67**

Model

No certificate attached	0
Linearity curve to be attached	L

Color of plastic heads (green)	0
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0	0	0	0	X	0	0	0	X	0
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Example: **LT67 - 0300 0000X000X00**
 LT67 displacement transducer, M12 4-pole connector output, useful electrical stroke (C.E.U.) 300mm., no certificate attached, green plastic components.

ACCESSORIES

STANDARD	Code
LT mounting kit, 2 brackets, screws	PKIT009
ON REQUEST	Code
M12 4-pole axial female connector, IP67-IEC48B clamp for ø6-ø8mm cable	CON293
M12 4-pole 90° radial female connector, IP67	CON050
Ball connection joint	PKIT015

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice